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COUNTY COUNCIL OF BERWICK.



ANNUAL REPORT

ON THE

Health and Sanitary Condition
of the County and Districts,

BY

ANDREW A. MCWHAN,

M.B., B.Sc., D.P.H.

MEDICAL OFFICER OF HEALTH.

YEAR 1911.

BERWICK-ON-TWEED :

PRINTED AT MARTIN'S PRINTING WORKS,
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COUNTY OF BERWICK.

Report by the Medical Officer of Health for the Year 1911.

*To the Local Government Board for Scotland, to
the County Council of Berwick, and District
Committees thereof.*

MY LORDS AND GENTLEMEN,

I have the honour to submit to
you my Report on the Health, Vital Statistics, and General
Sanitary Condition of the County of Berwick and its several
Districts for the year 1911.

I am,

My Lords and Gentlemen,

Your obedient Servant,

ANDREW A. McWHAN.

ST. MARY'S,

RESTON, *7th May*, 1912.

Arrangement of Report.

The first part of this Report deals with sanitary features and statistics, which are more or less common and of interest to the whole County. Each of the three Districts is subsequently treated in a section by itself. By this means needless repetition is avoided.

The Local Government Board, in exercise of the powers conferred by Section 15 of the Public Health (Scotland) Act, 1897, require that the Annual Report of the Medical Officer of Health of a District, for the year 1911, shall contain:—

- a.* A general account of influences and conditions injurious or dangerous to the health of the district, and of the measures that, in his opinion, should be adopted for its improvement.
- b.* A statement of the general enquiries he has made during the year, and of any special enquiries as to sanitary matters.
- c.* A general statement of any matters as to which he has given advice or granted certificates, including any action as to offensive trades.
- d.* A specific account of the administration of the Factory and Workshop Act, 1901, in workshops and workplaces, in terms of Section 132 of that Act, together with a tabular statement in the form issued by the Home Office.
- e.* An account of any proceedings under the Housing of the Working Classes Acts, 1890 to 1909, both as regards housing and town planning.
- f.* An account of any action taken under the Rivers Pollution Prevention Acts.
- g.* An account of the hospital accommodation available for persons suffering from infectious disease (including the means provided for the conveyance of such persons), and of the houses of reception, with observations on the furnishing, maintenance, administration, and adequacy of such accommodation, etc.
- h.* An account of the premises with necessary apparatus and attendance available for the destruction or disinfection of infected articles, also of other processes of disinfection in use, with observations on the adequacy of such arrangements and processes.
- i.* An account of the action taken to prevent the outbreak and spread of infectious disease.

- j.* A statement as to the causes, origin, and distribution of diseases within the district, and the extent to which the same have depended on, or have been influenced by conditions capable of removal or mitigation.
- k.* A statement of the measures adopted for the administrative control of pulmonary phthisis, with recommendations as to any further measures that might usefully be put in force by the Local Authority.
- l.* An account of the prevalence of infantile mortality in the district, with suggestions for the reduction thereof. In districts where the Notification of Births Act, 1907, has been adopted, the Medical Officer of Health is requested to report on the working of the Act since its adoption, with an account of the measures taken and the results thereof.
- m.* An account of the arrangements made for the carrying out of the Regulations, under the Public Health (Regulations as to Food) Act, 1907, with a statement of the action taken under these Regulations.
- n.* An account of the arrangements for the inspection of meat at slaughter-houses, shops, and elsewhere throughout the district.
- o.* A tabular statement, in such form as the Local Government Board may from time to time direct, of the sickness and mortality within the district.

Work of the Year.

On taking up my duties on May 16th last I found that no systematic office records as to infectious disease, mortality returns, or public health matters generally, had been previously kept. The want of such records meant that a large proportion of my time this year was devoted to the obtaining of information alone, and the most urgent step, therefore, was considered to be the institution of office methods and an organisation that would ensure continuity of public health administration in the County in future.

The main event of the year has been the initiation of a scheme of medical inspection of schools. This scheme has been

drafted in co-ordination with the public health service, and it is hoped it will be productive of much good to the County.

In accordance with circulars of the Local Government Board, new Registrars' returns were drafted and received the approval of the Board, and I took over all the arrangements in connection therewith from the District and Town Clerks' Offices. A scheme, approved by the Local Government Board, was drafted for repayment of the cost of diphtheria anti-toxin and arrangements were made in the Middle and West Districts, and the Burghs of Coldstream and Lauder, for the temporary notification of pulmonary phthisis during 1912. Memoranda relating to the National Insurance Bill were submitted to the District Committees during the year.

Work Unaccomplished.

As these questions of organisation took up practically the whole of my available time, it was almost impossible for me to do any systematic inspection in the County. This is a matter of regret as increased supervision of dairies and an inspection of the general conditions of the housing provided for the labouring classes are especially called for.

Acknowledgment of Assistance.

A great deal of time must inevitably be spent by a new County official in familiarising himself with the geography and local circumstances of the County and that is more especially the case when he takes over the reins of administration not merely from one predecessor, but from several. The task of picking up the threads of each District Medical Officer's work has not been an easy one, and would have been much more difficult had it not been for the generous manner in which these gentlemen assisted me with information regarding the sanitary history and conditions of their respective districts.

I am also indebted to Dr. Gibb, and the physician-superintendents of the Isolation Hospitals, for a like readiness to give information and help. Mr. Compland, the County Sanitary Inspector, has been of the very greatest assistance, and Mr. Wilson, County Clerk, and the District Clerks have ungrudgingly placed their great knowledge of County affairs at my disposal.

I am also indebted to the County Council for permission to avail myself of clerical assistance, without which, indeed, this Report could not have been produced for some considerable time yet.

Population of the County.

The population of the County, exclusive of the four Burghs within its borders, at the census taken on 2nd April, 1911, was 23,987 or 3.9 per cent. less than at last census. At the census of 1901, this figure was 24,023 and was 25,283 at that of 1891.

This shows a steadily diminishing population. The population of the whole County, burghal and landward, was 30,206 in 1801; in 1861 it rose to 36,613 but at each census after that the population steadily diminished until in 1911 the total burghal and landward population was 29,643, so that Berwick forms one of the four Counties in Scotland whose population is now under that of 1801.

Decrease in Population since 1901.

TABLE A.—Shows the decrease in population since 1901.

TABLE A.—Decrease in Population.

Population of		{		East District.	Middle District.	West District.	Total County of Berwick.		
Census 1901	-	-	9364	..	8648	..	6011	..	24,023
„ 1911	-	-	9017	..	8365	..	5705	..	23,087
Decrease in Population			347	..	283	..	306	..	936

The population of the 3 landward districts of Berwickshire at the census 1911 was therefore lower by 936 than that of the census 1901. This figure of 936, however, does not show the real loss in population sustained by the County during the decade 1901-1910. To find the real loss, we must consider two factors, viz. :—the increase of births over deaths, the natural increase, as it is termed, and the balance between the immigration into and emigration out of the County. The following table shows the number of births and deaths from 1st April, 1901, to 31st March, 1911.—i.e. from census to census.

TABLE B.—Births and Deaths, 1901-1911.

			East District.		Middle District.		West District.		County.
Births	-	-	1944	..	1720	..	1080	..	4744
Deaths	-	-	1225	..	1035	..	690	..	2950
Natural Increase			719	..	685	..	390	..	1794

It is at once apparent that the County has actually lost in population not merely the 936 of decrease, but the 1794 of natural increase. That is to say, during the last decade no fewer than 2730 persons, a number equal to nearly half the present population of the West District, emigrated out of the County. The loss will be better realised by reference to table C.

TABLE C.—Decrease in Population.

	East.		Middle.		West.		County.
Census Population, 1901,	9364	..	8648	..	6011	..	24,023
Add births, 1901-1911,	1944	..	1720	..	1080	..	4744
	11,308	..	10,368	..	7091	..	28,767
Deduct Deaths, 1901-1911,	1225	..	1035	..	690	..	2950
	10,083	..	9333	..	6401	..	25,817
Census Population, 1911,	9017	..	8365	..	5705	..	23,087
Loss in Population,	1066	..	968	..	696	..	2730
2730							

This decrease in population is then chiefly due to emigration out of the County, either cityward or abroad, and seems likely to continue.

Density of Population.

The area of Berwickshire, exclusive of the Burghs, is 291,732 acres or 455.83 square miles. The average density of population is 0.0790 persons to the acre or 50.6 to the square mile.

TABLE D.—Average Density of Population.

East District	..	..	73.87 persons to the square mile.
Middle „	..	..	49.02 „ „ „
West „	..	..	34.86 „ „ „

Births and Birth-Rate.

439 births were registered in the County of Berwick during 1911 (being 10 fewer than in 1910), the resulting birth-rate being 19.0339 per 1000 of the estimated population.

The birth-rates for the past five years and for the last census year, in each of the districts and in the County generally, have been as follows :—

TABLE E.—Birth-Rates, Berwickshire, 1901, 1906-1911.

Year.		East District.		Middle District.		West District.		County of Berwick.
1901	-	24.335	..	21.048	..	19.555	..	21.063
1906	-	20.520	..	19.488	..	17.169	..	19.312
1907	-	21.097	..	19.670	..	16.263	..	19.384
1908	-	17.770	..	19.972	..	18.688	..	18.80
1909	-	23.060	..	20.749	..	18.844	..	21.18
1910	-	20.946	..	19.743	..	17.305	..	19.6
1911	-	19.4272	..	17.1093	..	21.2392	..	19.0339

The birth-rates are low when compared with industrial communities and, taking the figures for the County as a whole, have a downward tendency. This lowness of the rate is due not merely to a decreased prolificness in the rural population, but also to the large proportion of persons in the middle period of life who have been attracted to residences outside the County. Berwickshire would thus appear to be an aging community.

Deaths and Death-Rate.

The deaths registered in the County of Berwick during the year 1911 were 290 in number. The total is adjusted, *i.e.*, deaths which occurred within the County of those not usually resident therein are deducted, and others, whose ordinary residence was in the County but who died outside, are added.

The general County death-rate is 12.5737 per 1000 of estimated population and, with the exception of the year 1908, is the highest since 1902.

District death-rates for the year 1901 and the past five years are thus shown ;—

TABLE F.—Death-Rates, Berwickshire, 1901, 1906-1911.

Year.	East District.	Middle District.	West District.	Berwick County.
1901	- 14.200 ..	13.299 ..	12.812 ..	13.6535
1906	- 13.239 ..	12.444 ..	11.099 ..	12.420
1907	- 13.657 ..	12.250 ..	10.491 ..	12.362
1908	- 13.857 ..	13.118 ..	12.165 ..	13.170
1909	- 12.485 ..	12.212 ..	12.266 ..	12.332
1910	- 13.926 ..	12.300 ..	10.600 ..	12.18
1911	- 12.8774 ..	13.4003 ..	10.8829 ..	12.5737

Ages at Death.

In the official tables of mortality at the end of this Report there is shown the number of deaths at each age period in the several Districts. In the following table there is submitted the relative percentages of the deaths at each of the usual age periods.

TABLE G.—Ages at Death (Percentages), Berwickshire, 1911.

	Under 1 Years.	1—2 Years.	2—5 Years.	5—15 Years.	15—25 Years.	25—45 Years.	45—65 Years.	over 65 Years.	Total
East District	12	—	1.7	1	2.6	9.5	22.4	50.8	100
Middle „	10.7	1	1	—	2.7	9	20.5	55.1	100
West „	9.7	—	1.6	1.6	3.2	16.1	16.1	51.7	100
Berwick County	11	.3	1.4	.7	2.7	10.7	20.4	52.8	100

Infantile Mortality.

32 deaths of children under one year of age took place in 1911.

The following table shows, in form similar to those presented above, the infantile mortality rate (number of deaths under one year per 1000 births) in the three Districts and the County generally, for the census year 1901, and since 1906.

TABLE H.—Infantile Mortality, Berwickshire, 1901, 1906-1911.

Year.	East District.	Middle District.	West District.	County of Berwick.
1906 -	- 86.0215 ..	78.3132 ..	90.9090 ..	84.2572
1907 -	- 47.3684 ..	53.8922 ..	75.2688 ..	55.5555
1908 -	- 132.2314 ..	82.8402 ..	66.0377 ..	93.4343
1909 -	- 73.1707 ..	68.5714 ..	114.2857 ..	80.4123
1910 -	- 81.0810 ..	72.2891 ..	81.6326 ..	77.9510
1911 -	- 80.0000 ..	83.9160 ..	49.5868 ..	72.8922

These rates are comparatively low.

Zymotic Death-Rate.

The deaths from zymotic diseases (exclusive of diarrhœa) numbered four for the County. Of these, three occurred in the East District—one from enteric fever, one from scarlet fever, and one from whooping cough. One occurred from whooping cough in the West District.

The zymotic death-rate for the East District is, therefore, .33 per 1000 ; nil for the Middle ; .17 for the West ; and .17 for the County generally.

Deaths caused by Tubercular Disease.

There were 33 deaths from tubercular disease registered in the County generally during the year, of which 28 were ascribed to pulmonary phthisis and five to other forms of tubercular disease.

TABLE I.—Deaths due to Tubercular Disease.

	East District.		Middle District.		West District.		County of Berwick. Total.
Deaths from							
Pulmonary Phthisis -	10	..	8	..	10	..	28
Death-Rate from							
Pulmonary Phthisis -	1.11	..	.95	..	1.75	..	1.21
Deaths from other							
forms of Tubercular							
Disease - -	2	..	2	..	1	..	5
Death-Rate from other							
forms of Tubercular							
Disease - -	.22	..	.24	..	.18	..	.22
Total Tubercular							
Death-Rate - -	1.33	..	1.19	..	1.93	..	1.43

Deaths from Cancer.

During the year 1911, no fewer than 30 deaths were ascribed to cancer or other malignant diseases in the County. This gives a death-rate of 1.3007 per 1000 of estimated population.

This is an exceedingly high death-rate—for the year 1910 the death-rate for all Scotland being only .931.

Deaths from Violence and Uncertified Deaths.

In 1911, the deaths from violence in the County numbered 6, and only 2 deaths were uncertified as to cause by a medical practitioner.

Notified Cases of Infectious Disease.

In Table J. is shown the number of cases of infectious disease notified in Berwickshire during 1911. The Cases are classified according to (a) District, (b) Nature, (c) Whether treated at home or in hospital, and (d) As to whether death or recovery resulted.

TABLE J.—Summary of Notifications—Berwickshire, 1911.

	Home.			Hospital			Total.		
EAST DISTRICT.	Recovered.	Died.		Recovered.	Died.		Recovered.	Died.	
Scarlet Fever	- 52	.. 0	..	37	.. 1	..	89	.. 1	
Diphtheria	- 8	.. 0	..	0	.. 0	..	8	.. 0	
Enteric Fever	- 1	.. 1	..	0	.. 0	..	1	.. 1	
Erysipelas	- 6	.. 0	..	0	.. 0	..	6	.. 0	
	—	—		—	—		—	—	
	67	1		37	1		104	2	
	—	—		—	—		—	—	
MIDDLE DISTRICT.									
Scarlet Fever	- 9	.. 0	..	2	.. 0	..	11	.. 0	
Diphtheria	- 7	.. 0	..	5	.. 0	..	12	.. 0	
Erysipelas	- 3	.. 0	..	0	.. 0	..	3	.. 0	
	—	—		—	—		—	—	
	19	0	..	7	0	..	26	0	
	—	—		—	—		—	—	
WEST DISTRICT.									
Scarlet Fever	- 6	.. 0	..	8	.. 0	..	14	.. 0	
Erysipelas	- 1	.. 0	..	0	.. 0	..	1	.. 0	
	—	—		—	—		—	—	
	7	0	..	8	0	..	15	0	
	—	—		—	—		—	—	
COUNTY OF BERWICK—TOTAL.									
Scarlet Fever	- 67	.. 0	..	47	.. 1	..	114	.. 1	
Diphtheria	- 15	.. 0	..	5	.. 0	..	20	.. 0	
Enteric Fever	- 1	.. 1	..	0	.. 0	..	1	.. 1	
Erysipelas	- 10	.. 0	..	0	.. 0	..	10	.. 0	
	—	—		—	—		—	—	
	93	1	..	52	1	..	145	2	
	94			53			147		

Infectious Diseases Notified since 1892.

The number of cases of notifiable infectious diseases notified each year since 1892 is shown in the following table :—

TABLE K.—Infectious diseases since 1892.

	Scarlet Fever.	Enteric Fever.	Ery- sipelas.	Puer- peral Fever.	Diph- theria.	Small- pox.	Typhus.	Total
1892	- 45	32	8	0	17	0	0	102
1893	- 94	15	16	1	24	0	0	150
1894	- 198	11	17	1	37	0	0	264
1895	- 86	10	12	1	23	0	0	132
1896	- 127	14	20	1	48	0	0	210
1897	- 90	24	13	0	41	0	0	168
1898	- 212	7	14	0	24	0	0	257
1899	- 95	10	12	0	35	0	0	152
1900	- 53	8	13	1	22	9	0	106
1901	- 63	6	14	1	35	0	0	119
1902	- 62	6	11	1	40	0	0	120
1903	- 54	3	14	3	42	1	0	117
1904	- 44	3	17	2	73	0	0	139
1905	- 51	1	15	0	19	0	0	86
1906	- 8	3	12	1	11	0	0	38
1907	- 40	3	10	2	16	0	0	71
1908	- 49	1	17	0	14	0	0	81
1909	- 119	6	21	1	59	0	0	209
1910	- 96	0	10	0	26	0	0	132
1911	- 115	2	10	0	20	0	0	147

A study of this table will be found of interest. It will be noticed that the number of notifications has been above the average and has only been exceeded seven times since 1892.

Scarlet Fever.

The following table gives the incidence of scarlet fever in the three Districts of the County from 1891 to 1898 and from 1909 to 1911, periods of exceptional prevalence.

TABLE L.—Incidence of Scarlet Fever.

		East District.		Middle District.		West District.
1894	..	74	..	117	..	7
1895	..	11	..	5	..	70
1896	..	26	..	18	..	83
1897	..	23	..	40	..	27
1898	..	106	..	69	..	37
<hr/>						
1909	..	12	..	42	..	65
1910	..	51	..	17	..	28
1911	..	90	..	11	..	14

The table shows that during the first period no District was exempt from epidemics, all being more or less affected in turn, and that, since 1909, the notifications from the Middle and West Districts have gone down, while those for the East District have increased.

It is noteworthy that the decrease in the Middle and West Districts coincides with the period since the opening of the Isolation Hospital at Gordon with its equipment of disinfectors, laundry, etc.

Diphtheria.

This disease in previous years has shown no partiality for any particular area, except Chirnside. Out of 143 notifications from the East District, during the decennium 1902-1911, no fewer than 93 or 65 per cent. were from Chirnside.

The exceptional prevalency of diphtheria in 1904 was due to an epidemic in the West District and in 1909 to one in the East District.

Enteric Fever.

Although the reduction in enteric fever notifications since 1892 has been most marked, it continues to be an infectious disease which must be reckoned with. Two cases were notified during 1911, one of which proved fatal. Both cases were in the East District.

Erysipelas.

No reduction has taken place in the numbers notified. So far, the disease has not proved amenable to public health measures. No other infectious diseases were notified during the year.

Non-Notifiable Diseases.

For the first time this year the Local Government Board have included in the returns required by them a statement as to the number of cases of non-notifiable disease which have come to the knowledge of the Medical Officer of Health. These cases usually only come to the knowledge of a Medical Officer during an epidemic which interferes with the attendance at some school and so, as it was only possible to find out school cases, a post card was sent to all headmasters in the County asking them to give me the numbers of children in their schools who were known to have been absent on account of non-notifiable infectious disease from 1st August, 1910 to 31st April, 1911. I am much indebted to these gentlemen for the trouble they took in supplying me with the figures shown in Table M.

TABLE M.—Non-Notifiable Disease Incidence in Schools.

Measles	..	..	..	206
German Measles	..	..	..	4
Whooping Cough	..	..	..	244
Chicken-Pox	..	..	..	82
Mumps	..	..	..	29
				<hr/>
				565

As these figures refer to school children for nine months of the year only and not to those before or beyond school age, it is evident that 565 cases form only a small part of the total number of cases of non-notifiable diseases which occur during a year.

Anthrax.

No case of anthrax in man has come to my knowledge during the past year. Five cases of anthrax in cattle and 13 cases of suspected anthrax occurred. I am indebted to the police for prompt information regarding these cases.

PREVENTION OF INFECTIOUS DISEASE.

Notifiable Disease.

The procedure with regard to cases of notifiable disease has been altered to bring it into conformity with the usual practice in other Counties. Notifications are sent first to Mr. Coupland who visits the house, enquires into the source of infection and the possibility of its spread and arranges for removal to hospital

if necessary. The results of his enquiries are entered on cards and immediately forwarded to me. These cards are then filed in a card index in such a manner as to be kept under notice until a clean bill of health is given for the house. This system has involved a considerable amount of additional work to Mr. Coupland and I am much indebted for the care and trouble he has taken in those enquiries.

A further visit by him is required for disinfection and if the case be kept at home, others may be required for the purpose of supervision. The labour involved in connection with infectious diseases will be better realised by a glance at page 32 of his report for this year, and the knowledge that the County extends over an area of 455 square miles.

Non-Notifiable Disease.

The question of the prevention of these diseases, whether looked at from the standpoint of the diseases themselves, their sequelæ or the havoc they play with school attendance, is most urgent. Before any means can be taken for their prevention, prompt information must be obtained concerning their existence and such information can only be obtained at present from school teachers or attendance officers. With a view to obtaining that information, the following paragraphs were inserted in a circular letter sent out to Headmasters in October last :—

“Prevention of spread
of Infectious Diseases.

I have to ask your cordial co-operation for this purpose. Forms are enclosed, one of which you might be good enough to fill up and forward to me immediately any case of infectious disease occurring in a school child comes to your notice.

“By Infectious Disease I mean not only Scarlet Fever and Diphtheria, but also diseases such as Measles, German Measles, Chicken Pox, Whooping Cough and Mumps.

“Prompt notice is of the greatest importance in suppressing outbreaks, and it will also enable me to furnish you with proper certificates should you, at any time, have to apply for a special grant.”

The necessity for prompt action is seen best in the case of measles. The symptoms in the initial stages of this disease are very much those of an ordinary cold in the head so that a child sickening from measles may remain at school during that stage—a most dangerously infective stage—and infect a number of other children in the room. Now the incubation period of measles may be as little as 10 days so that after the child has been removed from school, its illness diagnosed as measles, and the teacher made aware of the fact, only a few days may elapse till the scholars infected by this first case may develop measles in school, each acting as a focus of infection until every child who has not already had the disease may be infected in turn. The interference with education will now be so great that the School Board may approach the Medical Officer of Health with a view to getting the school closed. This course of events is no hypothetical case but what has happened in the County.

In such a case as this, prompt notification of the first case by the Teacher might result in all the children who were in danger from infection being excluded from school while they were liable to develop the disease. Only six or seven might be so affected and these would be further excluded. By this means an extensive outbreak with its resulting damage to educational efficiency might be averted.

Medical Inspection of Schools comes to be of great practical importance for this purpose as the epidemic history of every child in the County is detailed on the inspection cards. With the knowledge thus obtained only those children would be excluded whose cards show that they have not already had the disease. The benefits of directly co-ordinating the public health service with school medical inspection can thus readily be appreciated in the greater efficiency obtainable, and the desirability of providing efficient assistance for the great amount of work involved and without which the scheme cannot achieve its object can be realised. There is no doubt that whatever money is spent in assistance which can be used for this purpose, either by the County Council or the Education Committee, will be directly repaid and more than repaid by the extra grants paid on account of the better attendance at school.

The number of children absent from school from non-notifiable disease for a period of only nine months has been stated as 565. Many of these are absent for months at a time, and the time lost by the other children in affected families cannot even

be estimated, so that it is obvious how necessary it is, for the sake of greater educational efficiency alone, that the spread of these non-notifiable diseases should be combatted as far as possible.

Diphtheria Anti-Toxin.

With a view to facilitate the prompt treatment of cases of diphtheria, actual or suspected, with diphtheria anti-toxin, arrangements were made by the various local authorities whereby medical practitioners would be refunded the cost of anti-toxin administered to these or contact cases. The arrangements received the sanction of the Local Government Board in terms of Section 66 (1) (d.) of the Public Health (Scotland) Act. Circulars concerning the scheme were sent to all practitioners practising in the County.

Hospital Accommodation.

The provision of accommodation for cases of general infectious disease or smallpox in the Middle and West Districts is very satisfactory. In the East District, however, no proper provision exists for the reception of smallpox cases. Additional ward accommodation is required, and the need for a disinfectant is urgent.

Epidemic Illness and School Closure.

I find that in many parts of the County an idea exists that when school attendance is lowered by any outbreak of infectious disease a good way of saving grant consists in getting the Medical Officer of Health to advise closure of the school. To save future misapprehension I quote the following statements from circulars of the Local Government Board of Scotland and the Scotch Educational Department :—

Circular M. 111 of the Department states—"It is to be kept in view that the closing of a school or a division thereof is not justified by the fact that the fall in the attendance threatens to affect the grant to a serious extent."

The Local Government Board, in their letter of 28th July, 1904, state—"The fact that many of the school children are suffering from an infectious disease, and that the attendance is thereby greatly reduced, is not of itself sufficient ground for advising the closing of a school.

The Medical Officer of Health must be satisfied that the disease is being spread or is likely to be spread by the continued attendance of the children at school, and that the closing of the school offers a clear prospect of preventing or checking this spread. Even when satisfied that the disease is being spread, it will further be the duty of the Medical Officer of Health to consider whether the closing of one or more classes, or of one particular department, may be quite sufficient."

These instructions are definite and clearly define the duty of the Medical Officer of Health, so far as school closure is concerned. As a matter of fact, in the light of modern knowledge school closure is known to be of relatively little importance in averting the spread of disease and has been largely replaced by other methods, such as swabbing throats in outbreaks of diphtheria and the exclusion of individuals where bacteriological examination shows the infective nature of their throats.

Pulmonary Phthisis.

During 1911 no measures were taken in the County for the administrative control of pulmonary phthisis, except by the Middle and West Districts and the Burgh of Lauder, which arranged that Registrars were to give immediate notice of deaths from phthisis in order that disinfection measures might be carried out in the houses affected. For the year 1912, however, these Districts and also the Burgh of Coldstream have scheduled phthisis as a disease compulsorily notifiable under the Infectious Disease (Notification) Act.

While I regret that the East District did not see their way to adopt a similar course, I am of opinion that they should at least arrange for the disinfection of houses—as far as possible—on the death of any inmate from phthisis.

The control of the disease is important for the County. In the reports of my predecessor, Dr. Gibb, no subject is dealt with more fully than the problem of tuberculosis and none more deserved it. In his report for the year 1903 he wrote—"While tubercular disease is decreasing in the country generally, we in Berwickshire do not seem to make much headway."

That was in 1903 and in 1911 it has to be admitted that far from showing signs of decreasing, tubercular disease would appear to be on the increase. A few figures will show this. In

1901, the last census year, the death-rate from phthisis was .700 per 1000 as compared with 1.208 per 1000 for the total landward districts in Scotland. In 1910, the death-rate was .907, as compared with .877 for Scottish landward districts; while this year 28 deaths have been registered, giving a death-rate of 1.21 per 1000.

These figures show a prevalency of phthisis that is not creditable to such a rural and open part of the country and warrant serious consideration on the part of local authorities as to the means to be taken for its reduction. This is all the more necessary in view of the provisions of the National Insurance Act.

NATIONAL INSURANCE ACT.

This Act was the most important of any passed in 1911 relating to Public Health providing, *inter alia*, for the prevention of sickness as well as for its cure. It has been estimated that from one-third to one-half of all the public expenditure on the relief of destitution is due to sickness and one-seventh of it to tuberculosis alone, so that the importance of the Act cannot be underestimated.

The main provisions affecting the County Council are given here in an easily understood form.

Sanatorium Benefit.

Section 8 (1) (6).—States that one of the benefits conferred upon insured persons is treatment in a sanatorium or other institution or otherwise, when suffering from tuberculosis or such other diseases as the Local Government Board with the approval of the Treasury may appoint.

It will be at once noticed that treatment is not limited to phthisis or even to tuberculosis and that the method of treatment is not confined to institutional treatment.

Section 17.—Under this section the Insurance Committee may extend sanatorium benefit to the dependents of insured persons.

Administration of Sanatorium Benefit.

Section 16.—The administration of sanatorium benefit lies with the Insurance Committee, who are to make arrangements for providing treatment with persons or local authorities who

possess sanatoria, institutions, or other means which can be used for treatment.

Finance of Sanatorium Benefit.

Section 16.—(2)—The sums available for defraying the expenses of sanatorium benefit in each year shall be—

- (a) One shilling and threepence in respect of each insured person.
- (b) One penny per person, provided by Parliament.

This latter sum may be retained by the Insurance Commissioners for the purposes of research.

Deficit in Funds.

Section 17.—If in any year the amount available for defraying the expenses of sanatorium benefit is insufficient to meet the estimated expenditure on sanatorium benefit for insured persons and such dependents, the Insurance Committee may, through the Commissioners, transmit to the Treasury and to the County Council an account showing the estimated expenditure and the sums available and where the Treasury and the County Council sanction the expenditure, they shall be each liable to make good one-half of any sums so sanctioned by them.

Section 15.—(7)—A similar arrangement holds good when the amount payable to the Insurance Committee is insufficient to meet the expenditure on medical benefit

Erection of Sanatoria.

Section 64. In virtue of this section it is proposed to set aside a special grant of £1,500,000 towards the erection of sanatoria and other institutions for the treatment of tuberculosis and other diseases. The Scottish share of this grant will be distributed by the Local Government Board, and, should they authorise any County Council to proceed with the erection of such institutions, the Board may make the Council a grant for that purpose. For this purpose also, the Local Government Board may combine two or more areas.

Reports etc., by Insurance Committee.

Section 60.—(1)—The Insurance Committee shall make such reports and furnish such returns and statistical information as to the health of insured persons within their area as the Commissioners may, after consultation with the Local Government Board, prescribe and the Commissioners shall forward copies to the County Councils etc., interested in or affected by such reports.

It shall make such provision for the giving of lectures and the publication of information on questions of health as it thinks necessary or desirable.

(2)—For the purpose of assisting Insurance Committees in the exercise and performance of their powers and duties and with a view to promoting co-operation between such Committees and County Councils, any Medical Officer of Health may, at the request of an Insurance Committee and with the consent of the Council by whom he is appointed, attend meetings of the Committee and give such advice and assistance as is in his power.

Penalising Provisions.

Section 63.—Where extra expenditure on sickness is alleged to be due to insanitary conditions, etc., power is given for an enquiry, and the cost of the extra expenditure charged to the person or local authority responsible for the neglect.

Responsibility of County Council.

It will be apparent after reading the foregoing sections that a new responsibility is facing the County Council of Berwickshire. It is not that the Act directly puts new duties upon it but, by its provisions, it compels the County Council and other Authorities to face problems that might otherwise have been passed over. One of the first duties of the Berwickshire Insurance Committee will consist in arranging for sanatorium benefit and this it may do, not necessarily with the County Council, but with any person or body which possesses an institution or other means which can be used for the purpose of treatment. Should, however, the Committee be confronted with any insufficiency in their funds for sanatorium or medical benefit, it is to the County Council as well as to the Treasury they must come for sanction of the estimated

expenditure. One half of such expenditure will then fall to be paid by the County Council. As it will be difficult to refuse sanction to reasonable expenditure, the County Council should keep in touch with the whole movement from the beginning, and take full advantage of the means of co-ordination with the Insurance Committee set forth in section 60.

The Act and Pulmonary Phthisis.

The provisions in the Insurance Act in connection with sanatorium benefit will probably be taken most advantage of on account of pulmonary phthisis. It is important, therefore, to note how the County stands in that respect. Dr. Gibb, in his report for 1906, estimated that there were over 100 persons suffering from tubercular disease in the County, and it is probable that that figure is under and not over estimated. The next question is what proportion of that number would be compulsorily insured under the Act and as such entitled to sanatorium benefit.

On referring to the death returns, 28 deaths were registered in the three landward districts as having occurred from pulmonary phthisis during 1911. Out of that number, four would not have been insured, being either under 16 or over 65. Out of the remainder, twelve were men. No particulars were given about the occupation of one but the other eleven were all manual workers who would be compulsorily insured. Out of the twelve women, six were married or of no occupation, one died in Melrose Asylum, leaving five who would be compulsorily insured. That is to say, if the distribution of deaths in 1913 were to be the same as in 1911, out of the 28 deaths at least 16 would be those of insured persons and if this proportion were to hold good for the number of insured persons out of Dr. Gibb's estimate of 100 suffering from tubercular disease, it would mean that from the landward districts of the County alone, between 50 and 60 persons would be entitled to sanatorium benefit, either in a sanatorium or in some other manner.

This number, however, must be considered only as an estimate. A certain number of cases will become known in the Middle and West Districts, in 1912, by notification but it is probable that anything like the complete number at insured ages will only become known through the medium of the Insurance Committee's statistics and reports.

Control of Pulmonary Phthisis.

The first step in prevention has already been taken by two districts and two burghs in making phthisis notifiable for 1912. As the primary object of notification is to assist local authorities in the eradication of the disease, notification should be supplemented by other means and experience elsewhere shows the great value of Lady Health Visitors in this connection.

These ladies periodically visit the houses in which phthisical cases live and do all in their power to prevail upon the householders to exercise due care in the carrying out of measures for the welfare of the patient and for the prevention of the spread of the disease to other members of the household.

As many of the people visited have little idea of invalid cookery, the value of fresh air and open windows or the best ways of carrying out instructions given by their doctor, their visits come to be eagerly looked for by the patients themselves, as well as by their friends, and in addition they have the confidence of the medical practitioners who know well the help and encouragement that can be given by them. In these and other directions the importance and value of their work cannot be underestimated.

The best method for the County would probably be to join with the Education Committee in getting a qualified Lady Health Visitor who would act for this purpose, in the prevention of infantile mortality and also as School Nurse.

Conditions Prejudicial to Health.

Conditions unfavourable to the health of the community include :—

Defective water supply.

Infected or unclean milk.

Defective construction of dwelling-houses.

Defective condition of dwelling-houses as to ventilation, privy accommodation, etc.

Accumulation of putrid organic matter in close proximity to houses.

Errors in the rearing of infants and children, especially in regard to diet and purity of air supply.

Defective hygienic conditions in schools.

The importance of these subjects is such as to require special consideration and time, which, however, cannot be given without some form of skilled permanent assistance.

Water Supply.

With the exception of Chirnside where engineering troubles supervened, no difficulty was found with the sufficiency or purity of the water supplies of the County as a whole, so far as defective or polluted sources of supply were concerned. This cannot be said however as regards some small hamlets, farms and isolated cottages. These must be dealt with, one by one, as opportunity arises. No samples of water were submitted either for chemical analysis or for a bacteriological report.

Milk Supply.

In view of the potency of cow's milk as a cause of tuberculosis in infancy and childhood and its importance as a medium of conveying other diseases, a constant supervision of the conditions under which milk is produced and distributed is necessary. One difficulty in connection with milk supplies in rural districts is that much of the milk produced is exempt from supervision and control. To deal with this new legislation is necessary.

Royal Commission Report.

In connection with the purity of the milk supply and the inspection of meat, notice must be taken of the publication this year of the Final Report of the Royal Commission appointed to enquire into the relations of Human and Animal Tuberculosis. This Commission was appointed in the year 1901 under the following circumstances. After the discovery of the *tubercle bacillus* by Koch in 1882, tuberculosis disease in cattle and in man was generally considered to be the same, until about fourteen years later attention was drawn to differences between bacilli isolated from disease in cattle and disease in man. In 1901, at the Congress on Tuberculosis in London, Koch stated that tuberculosis of man and the cow were different and that tuberculosis of the cow could not be conveyed to man. As this statement, if it were the case, did away with the necessity for the various regulations concerning milk, butter and meat made against tuberculosis in animals and its transmission to man, a

Royal Commission was appointed the same year to enquire into the matter. As a result of their ten years' investigation, their report is very definite.

They find, *inter alia*, that cattle and man can be reciprocally infected with tuberculosis and that a considerable amount of the tuberculosis of childhood is to be ascribed to infection with bacilli of the bovine type transmitted to children in meals consisting largely of the milk of the cow. The report concludes with a recommendation that there should be no relaxation of the existing regulations as to milk and meat, but that on the contrary further regulations should be planned to afford better protection against the infection of human beings through the medium of articles of diet derived from tuberculous animals.

Housing of the Working Classes.

Under Section 30 of the Housing of the Working Classes Act, 1890, it is the duty of the Medical Officer of Health of every district to represent to the local authority of that district any dwelling-house which appears to him to be in a state so dangerous or injurious to health as to be unfit for human habitation. Under Section 31, on a complaint from four householders, he is bound to inspect any house which is alleged to be in such a state and to transmit the complaint with his opinion thereon to the local authority and if he is of opinion that the dwelling-house is in the condition aforesaid, shall represent the same to the local authority, but the absence of any such complaint shall not excuse him from inspecting any dwelling house and making a representation thereon to the local authority.

The powers of the local authority, however, in dealing with such houses under this Act are limited, it being necessary to prove the existence of a statutory nuisance or show to the satisfaction of the Court that the house is in a state so dangerous or injurious to health as to be unfit for human habitation. Their powers are now greatly extended under the provisions of the Housing, Town Planning, &c., Act 1909.

Section 17—(1)—of this Act is as follows :—

“It shall be the duty of every local authority within the meaning of Part II of the principal Act to cause to be made from time to time inspection of their district, with a view to ascertaining whether any dwelling-house

therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and for that purpose it shall be the duty of the local authority and of every officer of the local authority to comply with such Regulations and to keep such records as may be prescribed by the Board."

Regulations under this sub-section were made by the Local Government Board in 1910. Briefly put, Article 1 of these Regulations require the local authority, as part of their procedure, to make provision for a thorough inspection to be carried out from time to time and to cause to be prepared from time to time by the Medical Officer of Health, or by any other of their officers designated by them for the purpose, a list or lists of dwelling-houses, the early inspection of which is, in the opinion of the Medical Officer of Health or such other officer, desirable.

Article II requires that an inspection of a dwelling-house shall relate to the following matters, viz :—

- (1)—The arrangements for preventing the contamination of the water supply.
- (2)—Closet accommodation.
- (3)—Drainage.
- (4)—The condition of the dwelling-house in regard to light, the free circulation of air, dampness, cleanliness.
- (5)—The paving, drainage, and sanitary condition of any yard or outhouse belonging to or occupied with the dwelling-house.
- (6)—The arrangements for the deposit of refuse and ashes.
- (8)—Any other defects or conditions that may tend to render the dwelling-house dangerous or injurious to the health of an inhabitant.

The details noted in such inspections must be recorded in a book or filed in a card index and it will be the duty of the local authority at each of their ordinary meetings to take into consideration these records and take all such action within their powers as may be necessary or desirable in the case of any dwelling house to which the records relate. A note of any directions given and the result of any action taken shall be added to the records.

Sections 15 and 17 of Housing, Town Planning, &c., Act.

In connection with the lists of dwelling-houses required by Article 1 of the Local Government Board regulations, attention must be directed to the important distinction between the provisions of these sections.

Section 15 requires the local authority to call on the landlord of working class houses to keep them in all respects reasonably fit for habitation. Should he fail to do so, the local authority may itself do what is required, recovering the cost from the landlord in the manner provided by the Summary Jurisdiction Acts or by annual instalments extending over not longer than five years.

Section 17 deals with houses which are in a state so dangerous or injurious to health as to be unfit for human habitation and which require closure instead of repair.

Administration of Act.

One of the conditions of appointment of the Medical Officer of Health of this County is that he is to undertake, in the various districts, the duties provided for in the regulations made by the Local Government Board for Scotland, under Section 17 (1) of the Housing and Town Planning Act, 1909.

Since then the various districts have also designated the County Sanitary Inspector to act under that section.

An account of the inspections undertaken by him will be found in his report for this year. I have not been able to undertake any work of this nature as yet.

Building Bye Laws.

No building bye laws are at present in force in the County. In view of the operation of the Housing, Town Planning, &c., Act, it is specially advisable that such bye laws should be drafted. My chief experience with buildings in this County, so far, has been with schools and it is inconceivable that some of the present school structures would have been built had their plans been previously submitted to a Medical Officer of Health.

In connection with schools, I quote the following sentences from the Memorandum on the Medical Examination and Supervision of School Children, issued by the Scotch Education Department:—

“ More recently, many Medical Officers of Health have made thoroughly detailed surveys of the general sanitation, ventilation, lighting, drainage, and water supply of school buildings within their district, as well as of all other conditions affecting directly or indirectly the health of the children. In the counties, no less than in the towns, the construction of such buildings must fulfil the sanitary bye laws affecting buildings in general. In a very large number of cases, improvement, at the instance of the Medical Officer of Health, has been made in drainage, water supplies, school closets, and sanitary matters generally.”

It will be noticed that the middle sentence of this quotation does not hold good, so far as this County is concerned, as plans of new schools or of alterations in existing schools may be sent up to the Education Department for their approval and receive that approval under the impression that they conform with the building bye laws of the district, whereas, as a matter of fact, there are no bye laws with which they can conform.

Such building bye laws may be framed under section 181 of the Public Health (Scotland) Act, 1897.

Factories and Workshops.

There are 159 workshops in the County. These are visited at intervals by the Sanitary Inspector.

Bakehouses.

I have not yet had an opportunity to visit any of the bakehouses in the County.

Vaccination (Scotland) Act, 1907.

The number of statutory declarations for exemption registered in the County this year was 19.

Pollution of Rivers.

The only case of river pollution brought under my notice was the pollution of the Whitadder by the effluent of the Chirnside Paper Mill. The pollution is not one of recent standing as it was reported to the Rivers Pollution Commissioners in 1870 and has been more or less under observation ever since. Evidences of pollution are seen in the deposit in the river bed and in the frothy scum which I have noticed myself almost covering the river as far down as the Bluestone Ford. The purification arrangements at the mill would appear to be quite inadequate to deal properly with the effluent. At each of my visits to the mill the liquid was simply running through the settling tanks, and the filtering beds appeared of no use whatever. On the 3rd October the mill was visited by the County Analyst, Dr. Hunter. Samples of river water above and below the mill were taken then and on succeeding days, as a result of which he submitted an exhaustive report to the County Council. As it had been maintained that pollution of the river came from a source above the Chirnside Mill these analyses clearly showed that while the Chirnside Mill might not always be the only offender it was at least a regular offender in polluting the river. The samples of water taken from the river above the mill were those of uncontaminated river water. Those taken from below the mill showed chemical evidence of gross pollution. A sample taken on 17th October from the Whitadder above Allanton Bridge and before the junction of the Blackadder showed the alkalinity (expressed as Soda) as 5.45 grains per gallon and the total suspended matter as 4.57 parts per 100,000. On the 19th a sample taken from below the Victoria Bridge, four miles below the Paper Mill, gave an alkalinity of nearly 7 grains per gallon. As these figures were not taken from the effluent of the mill, but from the river water a considerable distance below the mill, the extent of the pollution will be evident.

DISTRICT REPORTS.

Comparative Vital Statistics, Berwickshire, 1911.

	East District.	Middle District.	West District.	Berwick- shire. Total.
Population, Census 1901	9,364	8,648	6,011	24,023
„ „ 1911	9,017	8,365	5,705	23,087
„ estimated middle of 1911,	9,008	8,358	5,697	23,064
Acreage,	78,043	109,108	104,581	291,732
Persons to the Acre,	0.115	0.077	0.055	0.079
Registered Births,	175	143	121	439
Birth-rate per 1000,	19.427	17.109	21.239	19.034
Registered Deaths (adjusted)*,	116	112	62	290
Death-rate per 1000 (adjusted),	12.877	13.400	10.883	12.573
Deaths under 1 Year,	14	12	6	32
Infantile Death-rate (per 1000 births),	80.000	83.916	49.586	72.892
Deaths over 65 years (percentage of the whole)	50.8	55.4	51.6	52.7

* That is, of persons usually resident within the District.

EAST DISTRICT.

General Matters.

These will be found fully discussed under the County report.

Water Supply.

Consequent on a complaint made at Mountalban, the water supply was enquired into, but beyond a technical fault which could easily be remedied, no fault could be found with the supply.

Drainage and Sewerage.

A new drainage and sewerage scheme has been completed at Coldingham and sewage purification works at Chirnside. At Chirnside every effort should now be made to abolish privies and earth closets and substitute water closets, and it is to be hoped that the substitution of a water carriage system of sewage disposal will reduce the liability to dipttheria that the village has suffered from. In connection with the sewage purification works I would point out that if they are to be a success in efficiently purifying the sewage, the works will require a continual and considerable amount of attention.

Factory and Workshops.

A tabular statement of the work performed in this connection accompanies this Report. The workshops in the district number 65, and these are inspected by Mr. Coupland. I have not been able to visit any personally.

Rivers Pollution

The Whitadder borders this district in the west, and an account of the steps taken in connection with its pollution will be found on page 30.

Hospital Accommodation.

The Isolation Hospital at Millerton has performed excellent service during the year, especially during the outbreak of scarlet fever in the first few months.

The hospital has been greatly improved by the installation of a system of acetylene gas lighting and by the opening of a new administrative block. The former administrative quarters were in the ward block, and these are now being converted into additional ward accommodation. Even with this addition, however, I am of opinion that the provision is not sufficient where two or more classes of infectious disease require treatment and that the building of another ward is called for. On 28th August the hospital was inspected by Mr. Wilson, the Local Government Board's Architect, and on his advice the Hospital Committee decided to abandon the use of stoves for heating purposes and instal a low pressure hot water heating system with a second boiler for providing a supply of hot water for domestic purposes.

The importance of these subjects is such as to require special consideration and time, which, however, cannot be given without some form of skilled permanent assistance.

Water Supply.

With the exception of Chirnside where engineering troubles supervened, no difficulty was found with the sufficiency or purity of the water supplies of the County as a whole, so far as defective or polluted sources of supply were concerned. This cannot be said however as regards some small hamlets, farms and isolated cottages. These must be dealt with, one by one, as opportunity arises. No samples of water were submitted either for chemical analysis or for a bacteriological report.

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The powers of the local authority, however, in dealing with such houses under this Act are limited, it being necessary to prove the existence of a statutory nuisance or show to the satisfaction of the Court that the house is in a state so dangerous or injurious to health as to be unfit for human habitation. Their powers are now greatly extended under the provisions of the Housing, Town Planning, &c., Act 1909.

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The number of statutory declarations for exemption registered in the County this year was 19.

Pollution of Rivers.

The only case of river pollution brought under my notice was the pollution of the Whitadder by the effluent of the Chirnside Paper Mill. The pollution is not one of recent standing as it was reported to the Rivers Pollution Commissioners in 1870 and has been more or less under observation ever since. Evidences of pollution are seen in the deposit in the river bed and in the frothy scum which I have noticed myself almost covering the river as far down as the Bluestone Ford. The purification arrangements at the mill would appear to be quite inadequate to deal properly with the effluent. At each of my visits to the mill the liquid was simply running through the settling tanks, and the filtering beds appeared of no use whatever. On the 3rd October the mill was visited by the County Analyst, Dr. Hunter. Samples of river water above and below the mill were taken then and on succeeding days, as a result of which he submitted an exhaustive report to the County Council. As it had been maintained that pollution of the river came from a source above the Chirnside Mill these analyses clearly showed that while the Chirnside Mill might not always be the only offender it was at least a regular offender in polluting the river. The samples of water taken from the river above the mill were those of uncontaminated river water. Those taken from below the mill showed chemical evidence of gross pollution. A sample taken on 17th October from the Whitadder above Allanton Bridge and before the junction of the Blackadder showed the alkalinity (expressed as Soda) as 5.45 grains per gallon and the total suspended matter as 4.57 parts per 100,000. On the 19th a sample taken from below the Victoria Bridge, four miles below the Paper Mill, gave an alkalinity of nearly 7 grains per gallon. As these figures were not taken from the effluent of the mill, but from the river water a considerable distance below the mill, the extent of the pollution will be evident.

DISTRICT REPORTS.

Comparative Vital Statistics, Berwickshire, 1911.

	East District.	Middle District.	West District.	Berwick- shire. Total.
Population, Census 1901	9,364	8,648	6,011	24,023
„ „ 1911	9,017	8,365	5,705	23,087
„ estimated middle of 1911,	9,008	8,358	5,697	23,064
Acreage,	78,043	109,108	104,581	291,732
Persons to the Acre,	0.115	0.077	0.055	0.079
Registered Births,	175	143	121	439
Birth-rate per 1000,	19.427	17.109	21.239	19.034
Registered Deaths (adjusted)*,	116	112	62	290
Death-rate per 1000 (adjusted),	12.877	13.400	10.883	12.573
Deaths under 1 Year,	14	12	6	32
Infantile Death-rate (per 1000 births),	80.000	83.916	49.586	72.892
Deaths over 65 years (percentage of the whole)	50.8	55.4	51.6	52.7

* That is, of persons usually resident within the District.

EAST DISTRICT.

General Matters.

These will be found fully discussed under the County report.

Water Supply.

Consequent on a complaint made at Mountalban, the water supply was enquired into, but beyond a technical fault which could easily be remedied, no fault could be found with the supply.

Drainage and Sewerage.

A new drainage and sewerage scheme has been completed at Coldingham and sewage purification works at Chiruside. At Chiruside every effort should now be made to abolish privies and earth closets and substitute water closets, and it is to be hoped that the substitution of a water carriage system of sewage disposal will reduce the liability to diphtheria that the village has suffered from. In connection with the sewage purification works I would point out that if they are to be a success in efficiently purifying the sewage, the works will require a continual and considerable amount of attention.

Factory and Workshops.

A tabular statement of the work performed in this connection accompanies this Report. The workshops in the district number 65, and these are inspected by Mr. Coupland. I have not been able to visit any personally.

Rivers Pollution

The Whitadder borders this district in the west, and an account of the steps taken in connection with its pollution will be found on page 30.

Hospital Accommodation.

The Isolation Hospital at Millerton has performed excellent service during the year, especially during the outbreak of scarlet fever in the first few months.

The hospital has been greatly improved by the installation of a system of acetylene gas lighting and by the opening of a new administrative block. The former administrative quarters were in the ward block, and these are now being converted into additional ward accommodation. Even with this addition, however, I am of opinion that the provision is not sufficient where two or more classes of infectious disease require treatment and that the building of another ward is called for. On 28th August the hospital was inspected by Mr. Wilson, the Local Government Board's Architect, and on his advice the Hospital Committee decided to abandon the use of stoves for heating purposes and instal a low pressure hot water heating system with a second boiler for providing a supply of hot water for domestic purposes.

Smallpox.

No proper provision for the isolation of smallpox cases exists in this district. There are a couple of portable wooden huts, measuring 12 feet by 10 feet, which are kept in sections, with the idea that should a case of smallpox occur in the district they could be erected in some convenient place and serve as a means of isolating the patient. No beds, bedding, cooking utensils or other furnishings are kept in stock and on notification of any case these as well as the site, would require to be obtained. It is obvious that the delay in isolating any case that might occur would totally defeat the whole object of prompt isolation. The number of contacts and possible secondary cases of the disease would be needlessly multiplied and the cost of procuring a temporary site for the huts would probably be excessive. The last time smallpox visited the district it found the isolation hospital at Millerton empty and the cases were treated there. The next visitation might not find such a fortunate coincidence. I am of opinion that the District Committee should take into consideration the advisability either of providing permanent accommodation or else of their entering the Border Smallpox Hospital Combination with its permanent hospital at Smailholm.

Ambulance.

The ambulance in use has seen better days and must be most uncomfortable to travel in. It has not even rubber tyres. Should the District Committee think of joining the Border Smallpox Combination, the distance from the East District to Smailholm would be too great for a horsed vehicle and they would require to consider the advisability of obtaining a motor ambulance. Such an ambulance has now seen over two years' use in the Melrose and Jedburgh Districts of Roxburghshire, and has, I understand, given every satisfaction.

Disinfection.

The sole method of disinfecting bedding, etc., at Millerton hospital is by means of formalin vapour in a small room set apart for that purpose. Its efficiency is nil. No clothing, bedding, etc. is removed with the patient to the hospital, but is left to defeat the objects of the sanitary inspector's disinfection of the house and to propagate the spread of the disease still further. The need for a steam disinfecter, large enough for all demands that may be made upon it, is most urgent.

Prevention of Infectious Disease.

The routine procedure in connection with infectious disease has already been referred to. One sanitary inspector cannot cope with an outbreak of disease of such magnitude as that of this year and the want of a disinfecter adds to the difficulties. The need for such an apparatus was much felt in connection with the two cases of enteric where the only means of disinfection were those limited means available in small cottages.

Ayton School was closed from January 19 to February 27, with a view to preventing the spread of scarlet fever.

Distribution of Disease.

Out of 106 cases of infectious diseases, 90 were notified from scarlet fever, eight from diphtheria, six from erysipelas and two from enteric fever.

Scarlet Fever.

The cases of scarlet fever were practically within and round about Ayton and constituted the second largest outbreak since 1891. As the epidemic was practically over when I took up duty I am not able to say anything as to its origin or mode of extension. On looking over the registers, however, it is quite obvious that the epidemic early got out of hand and the only manner in which the District Committee can insure against a recurrence is to provide an efficient disinfecter and greater assistance for enquiry and disinfection.

Diphtheria.

Out of the eight cases of diphtheria, six were notified in Chirnside. Out of the past ten years no fewer than 65 per cent. of the diphtheria cases notified in the East District came from Chirnside, and it is to be hoped that the provision of an ample water supply and efficient drainage system will greatly lessen this proportion in future.

Enteric Fever.

Two cases were notified and one died. No cause of origin could be traced in either case.

Pulmonary Phthisis.

No measures for the administrative control of this disease are in force in the district. As the death-rate from phthisis (1.11 per 1000) cannot be considered low, I regret that the District Committee did not see their way to include it among the notifiable diseases and am of opinion that they should at least arrange for the disinfection of the house on the death of any case.

Infantile Mortality.

The infantile mortality rate, *i.e.*, the number of deaths under one year per 1000 births, is comparatively low, and until I become better acquainted with the conditions of life in the district I am not prepared to offer any suggestions for its further reduction.

Inspection Food and Meat.

Inspections of food stuffs, meat and slaughter-houses have been carried out by Mr. Coupland. I see from his report that in the case of two animals found affected with generalised tuberculosis when slaughtered, the carcasses were destroyed and the circumstances reported.

Sickness and Mortality Statistics.

Tabular statements in the form prescribed by the Local Government Board are appended.

MIDDLE DISTRICT.

General Matters.

These will be found fully discussed under the County Report.

Factories and Workshops.

A tabular statement of the work performed in this connection accompanies this Report. The workshops in the district number 65 and these are inspected by Mr. Coupland. I have not been able to visit any personally.

Rivers Pollution.

The Whitadder borders this district in the east and an account of the steps taken in connection with its pollution will be found on page 30.

Hospital Accommodation and Disinfection.

All cases of infectious disease removed from home are sent to the well-equipped hospital at Gordon. The district forms part of the area served by the smallpox hospital at Smailholm.

Prevention of Infectious Disease.

The routine procedure in connection with infectious disease has already been referred to. It might be improved by the more general use of the disinfectant at Gordon Hospital for the purpose of thoroughly disinfecting the bedding and clothing of patients with infectious disease.

Distribution of Disease.

Out of 26 cases of infectious disease, eleven were notified from scarlet fever, twelve from diphtheria and three from erysipelas.

Scarlet Fever.

The notifications were distributed throughout the year except that five cases occurred in Swinton in July. The infection was imported from the East District and but for the prompt action of Mr. Coupland might have led to an extensive spread of the disease.

Diphtheria.

Of the twelve cases notified, eight were in the neighbourhood of Coldstream and owed their origin to infection conveyed from the Burgh of Coldstream. The cases were not of a severe type, probably owing to the early use of diphtheria anti-toxin.

Pulmonary Phthisis.

Deaths during the year numbered nine of which 1 was transferred to Partick, leaving a net number of eight for the year, giving a death-rate of .957 per 1000. The sole administrative

measures taken for its control during 1911 consisted in the disinfection of houses after the occurrence of a death from the disease. An arrangement was come to with the Registrars to notify at once all such deaths registered. I am glad, however, that the District Committee have scheduled phthisis as a compulsorily notifiable disease for the year 1912 and have no doubt that with some experience of its working, they will be prepared to continue its notification for a further period.

Infantile Mortality.

The infantile mortality rate, *i.e.*, the number of deaths under one year per 1000 births, is 83.916 and is comparatively low. Out of the twelve deaths of infants under one year, no fewer than six occurred in the Parish of Eccles.

Meat Inspection.

A proper inspection of meat is difficult to secure as the slaughter-houses are few and killing is at irregular intervals. A large proportion of the meat-supply is obtained from the Burghs of Coldstream and Duns.

Vital Statistics.

Tabular statements of sickness and mortality, etc., are appended.

WEST DISTRICT.

General Matters.

There is little to report for the year and general considerations will be found dealt with in the preliminary pages of this Report.

Factories and Workshops.

The workshops on the register number 42 and these are inspected by Mr. Coupland. I have been unable to visit any myself.

Hospital Accommodation.

All infectious cases removed are sent to the isolation hospital at Gordon. This hospital has ample accommodation and is well fitted with disinfectors, laundry etc. The district forms part of the area served by the smallpox hospital at Smailholm.

Prevention of Infectious Disease.

The routine procedure has already been referred to. More advantage might be taken of the disinfectors at the isolation hospital for the purpose of thoroughly disinfecting the bedding and clothing of infectious cases.

Distribution of Disease.

Cases of infectious disease numbered 15. One of these was notified from erysipelas; the rest were from scarlet fever and were distributed more or less evenly throughout the year.

Pulmonary Phthisis.

Deaths during the year numbered 8 and two were transferred, one from Melrose Asylum and one from Lanarkshire. This gave a total of 10 deaths and a death-rate of 1.755 per 1000. For such an open district this is a high death-rate and requires careful enquiry with a view to its reduction. During the year all deaths from phthisis were reported by the Registrars and the houses disinfected. The most important step for the administrative control of the disease was taken by the District Committee in including phthisis as a notifiable disease under the Notification Act for the year 1912.

Infantile Mortality.

The infantile mortality rate or the number of deaths under one year per 1000 births was very low, being only 49.586.

Vital Statistics.

Tabular statements of sickness and mortality as required by the Local Government Board are appended.

Burgh of Coldstream.

General Considerations.

During the year the health of the burgh remained good, except for an outbreak of diphtheria, and the death-rate was low.

In consequence of several complaints as to offensive smells emanating from a disused quarry adjoining the Duns Road I visited the quarry on 30th September. As the day was wet no offensive smell could be felt but I am of opinion nevertheless that the complaints were well founded and that the best thing the Town Council can do is to get the quarry filled up without delay. The town's rubbish might quite well be deposited there in the winter months at least.

Factories and Workshops.

The workshops number 35 and are kept under the supervision of Mr. Coupland. I have been unable to visit any personally.

Slaughter-House.

The public slaughter-house was visited and found in good order.

Hospital Accommodation.

As a fever ward is retained in the Coldstream Cottage Hospital, the Town Council did not enter the combination for Gordon Hospital.

The advantages however, of such a well equipped hospital as exists at Gordon with the additional advantage of a steam disinfecter should not be lost sight of by the Town Council.

Prevention of Infectious Disease.

By arrangement with Mr. Kinghorn, the procedure in the burgh now approximates to that in the County, a description of which has already been given. A scheme designed to secure the speedy use of anti-toxin in cases of diphtheria received the approval of the Local Government and its advent coincided with the most serious outbreak of the disease there has been for many years.

Distribution of Disease.

Cases of infectious disease notified during the year numbered 24, a number equal to the total notifications in the past 6 years. Out of that number 21 were from diphtheria, 2 from scarlet fever, 1 from erysipelas and 1 from enteric fever. This gives 25 cases although there were only 24 patients as one was notified as having diphtheria as well as scarlet fever.

Diphtheria.

As compared with the 21 cases of diphtheria this year, only 8 were notified in the previous 13 years. The attacks were of a more or less mild nature but probably the mildness of attack in many was due to the early injection of anti-toxin. The outbreak began on the 27th September when four cases were notified simultaneously and was practically over at the end of October. The first diagnosis made was confirmed by bacteriological examination of a throat swab and there is no doubt but that many more cases would have been reported had other bacteriological examinations been made of swabs from sore throats that were so common at this period.

Enteric Fever.

One case was notified but no source of infection could be found although careful enquiry was made.

Pulmonary Phthisis.

No deaths from this disease occurred during the year. The disease has been made compulsorily notifiable in 1912.

Infantile Mortality.

The rate was low, only one death under one year being registered.

Inspection of Meat.

The Burgh Sanitary Inspector regularly inspects the meat both at the slaughter-house and in the shops.

Vital Statistics.

Tabular statements as directed by the Local Government Board are given. After deducting three deaths transferred to other districts and adding one death transferred from Melrose Asylum, the total number of deaths in the burgh was 14 and it is worthy of note that out of this number, no fewer than 9 were over 65 years of age, of whom 6 were between 70 and 80, 1 between 80 and 90, 1 at 90, and one at 93.

Burgh of Lauder.

General Matters.

I have little to say about the health of Lauder, as nothing of note came under my observation since May 16th. Inspections of the two slaughter-houses were made when they were found to be kept in good condition.

Factories and Workshops.

These number 21 and were inspected by Mr. Coupland.

Hospital Accommodation.

Hospital accommodation is provided for at Gordon Hospital and small pox accommodation at Smailholm.

Infectious Disease.

Only one case of infectious disease, a case of scarlet fever, was notified during the year.

Pulmonary Phthisis.

One death occurred from this disease during the year and was transferred to Mid-Lothian and one was transferred inwards from Edinburgh. The disease has been scheduled as compulsorily notifiable during 1912.

Infantile Mortality.

Only one death occurred under one year in 1911.

Inspection of Food.

This is undertaken by the Sanitary Inspector and a certain amount of inspection of meat has been done by myself.

Vital Statistics.

The returns required by the Local Government Board are appended.

RETURN of BIRTHS and DEATHS, &c., registered during
 the Year ending 31st December, 1911.

County of Berwick.

East District.

POPULATION, Census 1911, 9017.

Estimated to Middle of 1911, 9008.

ACREAGE, 78,043.

REGISTERED BIRTHS, 175

{ Birth Rate per 1000 of Estimated Population ... 19.4272.

{ Deaths under 1 Year per 1000 Births ... 80.000.

CAUSE OF DEATH.			Deaths Registered in District.	Deaths Transferred from other Districts or Burghs.	Deaths Transferred to other Districts or Burghs.	Net or Adjusted Deaths at the Subjoined Ages.								Death Rates per 1000 of Estimated Population.	Total Deaths Registered as occurring in Institutions in the District.	
			1	2	3	4 All Ages.	5 Under 1 Year.	6 1 and under 2 Years.	7 2 and under 5 Years.	8 5 and under 15 Years.	9 15 and under 25 Years.	10 25 and under 45 Years.	11 45 and under 65 Years.	12 65 and upwards.	13	14
All Classes {	Certified	...	114	3	3	114	13	...	2	1	3	11	26	58	12.6554	...
	Uncertified	...	2	...	...	2	1	...	...	...	...	...	...	1	.2220	...
Enteric Fever ...			1	...	...	1	...	...	...	...	1	...	...	...	.1110	...
Typhus Fever ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...			1	...	...	1	...	...	...	1	...	...	...	...	.1110	...
Whooping Cough ...			1	...	...	1	1	...	...	...	...	...	...	...	.1110	...
Diphtheria and Croup...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ...			3	...	...	3	...	...	...	...	...	1	2	...	.3330	...
Septic Diseases.	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Septic Diseases (not Puerperal)	...	1	...	...	1	...	...	...	...	1	...	...	...	.1110	...
Puerperal Fever ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases.	Phthisis (Pulmonary Tuberculosis)	...	9	1	...	10	1	...	1	...	1	5	...	2	1.1101	...
	Tuberculous Meningitis...	...	1	...	...	1	1	...	...	...	...	...	...	...	.1110	...
	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	1	...	...	1	...	...	...	...	1	...	...	...	.1110	...
Cancer, Malignant Diseases ...			13	...	...	13	...	...	...	...	...	...	8	5	1.4431	...
Acute Articular Rheumatism (Rheumatic Fever) ...			...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System.	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cerebral Hæmorrhage	...	9	...	...	9	1	...	...	...	...	2	6	...	.9991	...
	Other Nervous Diseases	...	8	...	1	7	...	...	...	...	...	6	1	...	.7770	...
Diseases of Circulatory System			19	...	1	18	...	...	...	...	...	...	5	13	1.9982	...
Diseases of Respiratory System.	Pneumonia (all forms, including Broncho-Pneumonia)	...	2	...	...	2	1	...	...	...	...	1	...	...	.2220	...
	Bronchitis ...	...	3	...	...	3	2	...	...	...	...	1	...	...	.3330	...
	Other Respiratory Diseases ...	...	2	...	...	2	...	...	...	...	1	...	1	...	.2220	...
Digestive Diseases.	Diarrhœa and Enteritis	...	1	...	...	1	...	...	...	...	...	1	...	...	.1110	...
	Other Digestive Diseases ...	...	1	...	...	1	...	...	...	...	1	...	...	...	.1110	...
Violence ...			5	...	...	5	...	1	...	...	1	1	2	...	.5550	...
Other defined Diseases			33	2	1	34	6	...	...	...	1	1	...	26	3.7744	...
Diseases ill-defined or unknown			2	...	...	2	1	...	...	...	...	...	1	...	.2220	...
Total ...			116	3	3	116	14	...	2	1	3	11	26	59	12.8769	...

RETURN OF INFANT MORTALITY

For the Year ending 31st December, 1911.

County of Berwick.

East District.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSE OF DEATH.				Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 weeks	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total deaths under 1 Year
All Causes	{ Certified	...	...	4	1	1	...	7	2	3	...	2	13
	{ Uncertified	...	...	...	...	1	...	...	...	...	...	...	1
{ Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Measles	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	1	1

{ Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	1	...	...	1

{ Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	1	...	...	...	1
{ Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	1	...	1	...	...	...	...	1
{ Convulsions	...	...	...	...	...	...	...	...	...	1	...	...	1

{ Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	1	...	...	1
	...	...	...	...	...	...	...	...	1	1	...	...	2
{ Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Other Digestive Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Premature Birth	...	...	...	3	...	...	...	3	...	...	...	...	3

{ Atrophy, Debility, and Marasmus	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Atelectasis	...	...	...	1	...	...	...	1	...	...	...	...	1

{ Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...

{ Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	1	1	...	2	...	...	...	1	3
{ All other causes	...	...	...	...	...	...	...	...	...	...	...	...	...

TOTAL				4	1	2	...	7	2	3	...	2	14

Net Births in the year { Legitimate, 156.
 { Illegitimate, 19.

Net Deaths in { Legitimate Infants, 14.
 the year { Illegitimate Infants, 0.

I.—RETURN of CASES of INFECTIOUS DISEASE
notified, &c., during the Year ending
31st December, 1911.

COUNTY OF BERWICK.

EAST DISTRICT.

DISEASE.	Number of Cases coming to the knowledge of the Medical Officer of Health.									
	At all ages.	At Age—Years.							Cases removed to Hospital.	Cases not removed to Hospital.
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
1	2	3	4	5	6	7	8	9	10	

A.—NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever ...	2	...	...	...	1	1	...	...	...	2
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina ...	90	1	13	67	6	...	3	...	38	52
Diphtheria and Membranous Croup ...	8	...	1	4	2	1	...	...	...	8
Erysipelas ...	6	...	...	2	...	1	2	1	...	6
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...
Continued Fever...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	106	1	14	73	9	3	5	1	38	68

B.—NOT NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

None.

STATE NAME OF HOSPITAL OR HOSPITALS IN WHICH CASES WERE TREATED.

Isolation.

Millerton Hospital, Ayton.

RETURN of BIRTHS and DEATHS, &c., registered during
the Year ending 31st December, 1911.

County of Berwick.				Middle District.			
POPULATION, Census 1911,		8365.					
Estimated to Middle of 1911,		8358.					
ACREAGE, 109,108.							
REGISTERED BIRTHS, 143		{ Birth Rate per 1000 of Estimated Population		17.1093.			
		{ Deaths under 1 Year per 1000 Births		83.9160.			

CAUSE OF DEATH.				Deaths Registered in District.	Deaths Transferred from other Districts or Burghs.	Deaths Transferred to other Districts or Burghs.	Net or Adjusted Deaths at the Subjoined Ages.										Death Rates per 1000 of Estimated Population.	Total Deaths Registered as occurring in Institutions in the District.
				1	2	3	4 All Ages.	5 Under 1 Year.	6 1 and under 2 Years.	7 2 and under 5 Years.	8 5 and under 15 Years.	9 15 and under 25 Years.	10 25 and under 45 Years.	11 45 and under 65 Years.	12 65 and upwards.	13	14	
All Classes { Certified				110	4	2	112	12	1	1	...	3	10	23	62	13.4003	...	
{ Uncertified ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Septic Diseases. { Erysipelas ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other Septic Diseases (not Puerperal) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases. { Phthisis (Pulmonary Tuberculosis)				9	...	1	8	...	...	...	...	1	5	2	...	.9571	...
{ Tuberculous Meningitis... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Abdominal Tuberculosis				1	...	...	1	1	...	...	...	...	...	...	...	.1196	...
{ Other Tuberculous Diseases				1	...	...	1	...	...	...	...	1	...	...	...	.1196	...
Cancer, Malignant Diseases				13	...	...	13	...	...	...	...	...	...	4	9	1.5554	...
Acute Articular Rheumatism (Rheumatic Fever) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System. { Meningitis ... ..				...	1	...	1	...	1	...	...	...	...	...	...	.1196	...
{ (not Tuberculous) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Cerebral Hæmorrhage				9	...	...	9	...	...	...	...	...	3	6	...	1.0764	...
{ Other Nervous Diseases				11	...	1	10	...	...	...	...	1	1	2	6	1.1964	...
Diseases of Circulatory System				21	...	...	21	...	...	...	...	1	1	5	14	2.5124	...
Diseases of Respiratory System. { Pneumonia (all forms, including Broncho-Pneumonia)				6	2	...	8	2	...	1	...	1	2	2	...	.9568	...
{ Bronchitis				2	...	...	2	...	...	...	...	...	...	2	...	.2393	...
{ Other Respiratory Diseases ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Digestive Diseases. { Diarrhœa and Enteritis				1	...	...	1	1	...	...	...	...	...	...	...	.1196	...
{ Other Digestive Diseases				1	...	...	1	...	...	...	...	...	...	1	...	.1196	...
Violence ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other defined Diseases				34	1	...	35	8	...	...	...	1	4	22	...	4.1876	...
Diseases ill-defined or unknown				1	...	...	1	...	...	...	...	...	1	...	...	.1196	...
Total				110	4	2	112	12	1	1	...	3	10	23	62	13.3990	...	

RETURN OF INFANT MORTALITY

For the Year ending 31st December, 1911.

County of Berwick.

Middle District.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSE OF DEATH.			Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 weeks	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total deaths under 1 Year
All Causes	Certified	...	6	...	2	...	8	...	1	1	2	12
	Uncertified	...	...	...	...	...	...	...	...	...	...	...
{ Small-pox ...			...	...	...	...	...	...	...	...	...	...
{ Chicken-pox ...			...	...	...	...	...	...	...	...	...	...
{ Measles ...			...	...	...	...	...	...	...	...	...	...
{ Scarlet Fever ...			...	...	...	...	...	...	...	...	...	...
{ Whooping Cough ...			...	...	...	...	...	...	...	...	...	...
{ Diphtheria and Croup ...			...	...	...	...	...	...	...	...	...	...
{ Erysipelas ...			...	...	...	...	...	...	...	...	...	...
{ Tuberculous Meningitis ...			...	...	...	...	...	...	...	...	...	...
{ Abdominal Tuberculosis ...			...	...	1	...	1	...	...	...	...	1
{ Other Tuberculous Diseases ...			...	...	...	...	...	...	...	...	...	...
{ Meningitis (not Tuberculous) ...			...	...	...	...	...	...	...	...	...	...
{ Convulsions ...			...	...	...	...	...	...	...	...	...	...
{ Pneumonia (all forms) ...			...	...	1	...	1	...	...	...	1	2
{ Bronchitis ...			...	...	...	...	...	...	...	...	...	...
{ Laryngitis ...			...	...	...	...	...	...	...	...	...	...
{ Diarrhoea and Enteritis ...			...	...	...	...	...	...	...	...	...	...
{ Other Digestive Diseases ...			...	...	...	...	...	...	...	...	...	...
{ Congenital Malformations ...			...	...	...	...	...	...	...	...	...	...
{ Premature Birth ...			...	4	...	...	4	...	...	...	...	4
{ Atrophy, Debility, and Marasmus ...			...	...	...	...	...	...	...	...	...	...
{ Atelectasis ...			...	1	...	...	1	...	...	...	...	1
{ Injury at Birth ...			...	...	...	...	...	...	...	...	...	...
{ Suffocation, overlying ...			...	...	...	...	...	...	...	...	...	...
{ Syphilis ...			...	...	...	...	...	...	...	...	...	...
{ Rickets ...			...	...	...	...	...	...	...	...	...	...
{ All other causes ...			...	1	...	...	1	...	1	...	1	3
TOTAL			6	...	2	...	8	...	1	1	2	12

Net Births in the year { Legitimate, 126.
 { Illegitimate, 17.

Net Deaths in { Legitimate Infants, 10.
 the year { Illegitimate Infants, 2.

I.—RETURN of CASES of INFECTIOUS DISEASE
notified, &c., during the Year ending
31st December, 1911.

COUNTY OF BERWICK.

MIDDLE DISTRICT.

DISEASE.	Number of Cases coming to the knowledge of the Medical Officer of Health.									
	At all ages.	At Age—Years.							Cases removed to Hospital.	Cases not removed to Hospital.
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
1	2	3	4	5	6	7	8	9	10	

A.—NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever ...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina ...	11	...	2	9	...	...	...	...	2	9
Diphtheria and Membranous Croup ...	12	...	2	6	3	...	1	...	5	7
Erysipelas ...	3	...	...	...	...	...	3	...	...	3
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...
Continued Fever...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	26	...	4	15	3	...	4	...	7	19

B.—NOT NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

None.

STATE NAME OF HOSPITAL OR HOSPITALS IN WHICH CASES WERE TREATED.

Gordon Hospital.

RETURN of BIRTHS and DEATHS, &c., registered during
the Year ending 31st December, 1911.

County of Berwick.			West District.		
POPULATION, Census 1911,	5705.				
Estimated to Middle of 1911,	5697.				
ACREAGE, 104,581.					
REGISTERED BIRTHS, 121	{ Birth Rate per 1000 of Estimated Population		...	21.2392.	
	{ Deaths under 1 Year per 1000 Births		...	49.5868.	

CAUSE OF DEATH.				Deaths Registered in District.	Deaths Transferred from other Districts or Burghs.	Deaths Transferred to other Districts or Burghs.	Net or Adjusted Deaths at the Subjoined Ages.												Death Rates per 1000 of Estimated Population.	Total Deaths Registered as occurring in Institutions in the District.
				1	2	3	4 All Ages.	5 Under 1 Year.	6 1 and under 2 Years.	7 2 and under 5 Years.	8 5 and under 15 Years.	9 15 and under 25 Years.	10 25 and under 45 Years.	11 45 and under 65 Years.	12 65 and upwards.	13	14			
All Classes { Certified				62	3	3	62	6	...	1	1	2	10	10	32	10.8829	...			
{ Uncertified ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough				1	...	...	1	1	...	...	...	...	...	...	...	.1755	...
Diphtheria and Croup... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza				1	...	...	1	...	...	...	...	...	...	1	...	.1755	...
Septic cases. { Erysipelas ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other Septic Diseases (not Puerperal) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases. { Phthisis (Pulmonary Tuberculosis)				8	2	...	10	...	...	...	1	5	4	...	...	1.7553	...
{ Tuberculous Meningitis... ..				1	...	...	1	1	...	...	...	...	...	...	...	.1755	...
{ Abdominal Tuberculosis ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other Tuberculous Diseases ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, Malignant Diseases				5	...	1	4	...	...	...	...	2	2	...	...	.7021	...
Acute Articular Rheumatism (Rheumatic Fever) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System. { Meningitis ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ (not Tuberculous) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Cerebral Hæmorrhage				3	...	...	3	...	...	...	...	...	...	3	...	.5265	...
{ Other Nervous Diseases				5	...	1	4	...	...	...	...	1	1	2	...	.7021	...
Diseases of Circulatory System				10	...	...	10	...	...	...	...	...	...	3	7	1.7553	...
Diseases of Respiratory System. { Pneumonia (all forms, including Broncho-Pneumonia)				1	...	...	1	...	...	...	...	...	...	1	...	.1755	...
{ Bronchitis				6	...	...	6	1	...	...	...	...	...	5	...	1.0531	...
{ Other Respiratory Diseases ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Digestive Diseases. { Diarrhœa and Enteritis				1	...	...	1	...	...	...	...	...	1	...	...	.1755	...
{ Other Digestive Diseases				1	...	...	1	...	...	...	...	...	...	1	...	.1755	...
Violence				1	...	...	1	...	1	...	...	...	...	...	...	.1755	...
Other defined Diseases				17	1	1	17	2	...	...	1	1	1	...	12	2.9840	...	
Diseases ill-defined or unknown				1	...	...	1	1	...	...	...	...	...	...	...	.1755	...
Total				62	3	3	62	6	...	1	1	2	10	10	32	10.8824	...			

RETURN OF INFANT MORTALITY

For the Year ending 31st December, 1911.

County of Berwick.

West District.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSE OF DEATH.				Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 weeks	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total deaths under 1 Year
All Causes	Certified	...	...	2	1	...	...	3	1	...	1	1	6
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...
{ Small-pox ...				...	...	...	...	...	...	...	...	...	...
{ Chicken-pox ...				...	...	...	...	...	...	...	...	...	...
{ Measles ...				...	...	...	...	...	...	...	...	...	...
{ Scarlet Fever ...				...	...	...	...	...	...	...	...	...	...
{ Whooping Cough ...				...	...	...	...	...	1	...	...	...	...
{ Diphtheria and Croup ...				...	...	...	...	...	...	...	...	...	...
{ Erysipelas ...				...	...	...	...	...	...	...	...	...	...
{ Tuberculous Meningitis ...				...	...	...	...	...	...	...	...	1	...
{ Abdominal Tuberculosis ...				...	...	...	...	...	...	...	...	...	...
{ Other Tuberculous Diseases ...				...	...	...	...	...	...	...	...	...	...
{ Meningitis (not Tuberculous) ...				...	...	...	...	...	...	...	...	...	...
{ Convulsions ...				...	1	...	...	1	...	...	...	...	...
{ Pneumonia (all forms) ...				...	...	...	...	...	...	...	...	...	...
{ Bronchitis ...				...	...	...	...	...	...	...	1	...	...
{ Laryngitis ...				...	...	...	...	...	...	...	...	...	...
{ Diarrhoea and Enteritis ...				...	...	...	...	...	...	...	...	...	...
{ Other Digestive Diseases ...				...	...	...	...	...	...	...	...	...	...
{ Congenital Malformations ...				...	...	...	...	...	...	...	...	...	...
{ Premature Birth ...				...	1	...	...	1	...	...	...	...	...
{ Atrophy, Debility, and Marasmus ...				1	...	...	...	1	...	...	...	...	...
{ Atelectasis ...				...	...	...	...	...	...	...	...	...	...
{ Injury at Birth ...				...	...	...	...	...	...	...	...	...	...
{ Suffocation, overlying ...				...	...	...	...	...	...	...	...	...	...
{ Syphilis ...				...	...	...	...	...	...	...	...	...	...
{ Rickets ...				...	...	...	...	...	...	...	...	...	...
{ All other causes ...				...	...	...	...	...	...	...	...	...	...
TOTAL				2	1	...	...	3	1	...	1	1	6

Net Births in the year { Legitimate, 107.
Illegitimate, 14.

Net Deaths in the year { Legitimate Infants, 6.
Illegitimate Infants, 0.

I.—RETURN of CASES of INFECTIOUS DISEASE
notified, &c., during the Year ending
31st December, 1911.

COUNTY OF BERWICK.

WEST DISTRICT.

DISEASE.	Number of Cases coming to the knowledge of the Medical Officer of Health.									
	At Age—Years.								Cases removed to Hospital.	Cases not removed to Hospital.
	At all ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
	1	2	3	4	5	6	7	8	9	10

A.—NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever ...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina ...	14	...	5	8	1	...	...	...	8	6
Diphtheria and Membranous Croup ...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	1	...	...	...	...	...	1	...	...	1
Puerperal Fever...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever...	...	...	...	...	...	...	...	...	...	...
Continued Fever...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	15	...	5	8	1	...	1	...	8	7

B.—NOT NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

None.

STATE NAME OF HOSPITAL OR HOSPITALS IN WHICH CASES WERE TREATED.

Gordon Isolation Hospital.

RETURN of BIRTHS and DEATHS, &c., registered during
 the Year ending 31st December, 1911.

County of Berwick.

Burgh of Coldstream.

POPULATION, CENSUS 1911, 1375.
 Estimated to Middle of 1911, 1375.
 ACREAGE, 235.

REGISTERED BIRTHS, 23 { Birth Rate per 1000 of Estimated Population ... 16.7272.
 { Deaths under 1 Year per 1000 Births ... 43.4783.

CAUSE OF DEATH.				Deaths Registered in District.	Deaths Transferred from other Districts or Burghs.	Deaths Transferred to other Districts or Burghs.	Net or Adjusted Deaths at the Subjoined Ages.								Death Rates per 1000 of Estimated Population.	Total Deaths Registered as occurring in Institutions in the District.	
				1	2	3	4 All Ages.	5 Under 1 Year.	6 1 and under 2 Years.	7 2 and under 5 Years.	8 5 and under 15 Years.	9 15 and under 25 Years.	10 25 and under 45 Years.	11 45 and under 65 Years.	12 65 and upwards.	13	14
All Causes	{	Certified	...	16	1	3	14	1	...	...	...	...	3	1	9	10.1818	4
		Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Septic Diseases.	{	Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Septic Diseases (not Puerperal)	1	...	...	1	...	...	...	1	...	...	...	...	...	7272	1
Puerperal Fever ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases.	{	Phthisis (Pulmonary Tuberculosis) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Tuberculous Meningitis... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Abdominal Tuberculosis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Tuberculous Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, Malignant Diseases				2	...	...	2	...	...	...	...	...	...	2	1.4545	...	
Acute Articular Rheumatism (Rheumatic Fever) ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System.	{	Meningitis (not Tuberculous)	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
		Cerebral Hæmorrhage ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Nervous Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Circulatory System				2	1	1	2	...	...	...	...	1	...	1	1.4545	...	
Diseases of Respiratory System.	{	Pneumonia (all forms, including Broncho-Pneumonia)	6	...	...	6	1	...	...	...	...	1	1	3	4.3636	1	...
		Bronchitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Respiratory Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Digestive Diseases.	{	Diarrhœa and Enteritis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Digestive Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Violence ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other defined Diseases				4	...	1	3	...	...	...	...	...	...	3	2.1818	1	...
Diseases ill-defined or unknown ... ..				...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total				16	1	3	14	1	...	...	...	...	3	1	9	10.1816	4

RETURN OF INFANT MORTALITY

For the Year ending 31st December, 1911.

County of Berwick.

Burgh of Coldstream.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSE OF DEATH.			Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 weeks	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total deaths under 1 Year
All Causes	{ Certified	...	...	...	...	...	...	...	...	...	1	1
	{ Uncertified	...	...	...	...	...	...	...	...	...	..	..
{	Small-pox	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...
{	Measles	...	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
{	Whooping Cough	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...
{	Erysipelas	...	...	...	...	...	...	...	...	...	...	...
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	1	1
{	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...
{	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	...	...	...	...	...	...	...	...	...	1	1
{	Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	...	...
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...
{	Laryngitis	...	...	...	...	...	...	...	...	...	...	...
	Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...
{	Other Digestive Diseases	...	...	...	...	...	...	...	...	...	...	...
	Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...
{	Premature Birth	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, and Marasmus	...	...	...	...	...	...	...	...	...	...	...
{	Atelectasis	...	...	...	...	...	...	...	...	...	...	...
	Injury at Birth	...	...	...	...	...	...	...	...	...	...	...
{	Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...	...	...	...	...
{	Rickets	...	...	...	...	...	...	...	...	...	...	...
	All other causes	...	...	...	...	...	...	...	...	...	...	...
TOTAL			...	...	...	...	...	...	...	...	1	1

Net Births in the year { Legitimate, 20.
Illegitimate, 3.

Net Deaths in { Legitimate Infants, 1.
the year { Illegitimate Infants, 0.

I.—RETURN of CASES of INFECTIOUS DISEASE
notified, &c., during the Year ending
31st December, 1911.

County of Berwick.

Burgh of Coldstream.

DISEASE.	Number of Cases coming to the knowledge of the Medical Officer of Health.									
	At all ages.	At Age—Years.							Cases removed to Hospital.	Cases not removed to Hospital.
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
		1	2	3	4	5	6	7	8	9	10

A.—NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever ...	1	...	...	...	...	1	...	...	...	1
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Searlatina ...	2	...	2	...	...	...	...	...	...	2
Diphtheria and Membranous Croup ...	21	...	4	13	2	2	...	...	1	20
Erysipelas ...	1	...	...	...	...	...	...	1	...	1
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...
Continued Fever...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	25	...	6	13	2	3	...	1	1	24

One patient of 5 years of age was notified both as Scarlet Fever and Diphtheria,
so that, although 25 cases, there were only 24 patients.

B.—NOT NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Non-notifiable Diseases were not reported.

STATE NAME OF HOSPITAL OR HOSPITALS IN WHICH CASES WERE TREATED.

Gordon Hospital.

RETURN of BIRTHS and DEATHS, &c., registered during the Year ending 31st December, 1911.

County of Berwick.

Burgh of Lauder.

POPULATION, Census 1911, 659.

Estimated to Middle of 1911, 659.

ACREAGE, 100.

REGISTERED BIRTHS, 13

{ Birth Rate per 1000 of Estimated Population ... 19.7268.
{ Deaths under 1 Year per 1000 Births ... 76.9231.

CAUSE OF DEATH.

CAUSE OF DEATH.				Deaths Registered in District.	Deaths Transferred from other Districts or Burghs.	Deaths Transferred to other Districts or Burghs.	Net or Adjusted Deaths at the Subjoined Ages.								Death Rates per 1000 of Estimated Population.	Total Deaths Registered as occurring in Institutions in the District.	
				1	2	3	4 All Ages.	5 Under 1 Year.	6 1 and under 2 Years.	7 2 and under 5 Years.	8 5 and under 15 Years.	9 15 and under 25 Years.	10 25 and under 45 Years.	11 45 and under 65 Years.	12 65 and upwards.	13	14
All Causes	Certified	...	...	10	2	1	11	1	...	1	...	2	3	4	16.6919	...
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Septic Diseases.	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Septic Diseases (not Puerperal)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases.	Phthisis (Pulmonary Tuberculosis)	...	...	1	1	1	1	...	...	...	...	1	...	...	1.5174	...
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, Malignant Diseases	...	...	1	1	...	2	...	...	...	...	...	2	...	3.0349	...	
Acute Articular Rheumatism (Rheumatic Fever)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Nervous System.	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cerebral Hemorrhage	...	1	...	...	1	...	...	...	...	...	1	...	1.5174	...	...
	Other Nervous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Circulatory System	...	2	...	...	2	...	...	...	...	...	...	1	1	3.0349	...	...
Diseases of Respiratory System.	Pneumonia (all forms, including Broncho-Pneumonia)	...	1	...	...	1	...	1	...	...	...	...	...	1.5174	...	...
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Respiratory Diseases	...	2	...	...	2	1	...	...	...	...	1	...	3.0349	...	...
Digestive Diseases.	Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Digestive Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Violence	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other defined Diseases	...	...	2	...	...	2	...	...	...	...	...	...	2	3.0349	...	...
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	10	2	1	11	1	...	1	...	2	3	4	16.6918	...	...

RETURN OF INFANT MORTALITY

For the Year ending 31st December, 1911.

County of Berwick.

Burgh of Lauder.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSE OF DEATH.			Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 weeks	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total deaths under 1 Year
All Causes {	Certified ...	...	...	...	...	...	...	1	...	...	...	1
	Uncertified	...	...	...	...	...	...	...	...	...	...	...
{	Small-pox ...	...	...	...	...	...	...	...	...	...	...	...
{	Chicken-pox ...	...	...	...	...	...	...	...	...	...	...	...
{	Measles ...	...	...	...	...	...	...	...	...	...	...	...
{	Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...
{	Whooping Cough ...	...	...	...	...	...	...	...	...	...	...	...
{	Diphtheria and Croup ...	...	...	...	...	...	...	...	...	...	...	...
{	Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...
{	Tuberculous Meningitis ...	...	...	...	...	...	...	...	...	...	...	...
{	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...
{	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...
{	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...
{	Convulsions ...	...	...	...	...	...	...	...	...	...	...	...
{	Pneumonia (all forms) ...	...	...	...	...	...	...	1	...	...	...	1
{	Bronchitis ...	...	...	...	...	...	...	...	...	...	...	...
{	Laryngitis ...	...	...	...	...	...	...	...	...	...	...	...
{	Diarrhœa and Enteritis ...	...	...	...	...	...	...	...	...	...	...	...
{	Other Digestive Diseases	...	...	...	...	...	...	...	...	...	...	...
{	Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...
{	Premature Birth ...	...	...	...	...	...	...	...	...	...	...	...
{	Atrophy, Debility, and Marasmus	...	...	...	...	...	...	...	...	...	...	...
{	Atelectasis ...	...	...	...	...	...	...	...	...	...	...	...
{	Injury at Birth ...	...	...	...	...	...	...	...	...	...	...	...
{	Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...
{	Syphilis ...	...	...	...	...	...	...	...	...	...	...	...
{	Rickets ...	...	...	...	...	...	...	...	...	...	...	...
{	All other causes	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...			...	...	...	...	...	1	...	...	...	1

Net Births in the year { Legitimate, 12.
Illegitimate, 1.

Net Deaths in { Legitimate Infants, 1.
the year { Illegitimate Infants, 0.

I.—RETURN of CASES of INFECTIOUS DISEASE
 notified, &c., during the Year ending
 31st December, 1911.

County of Berwick.

Burgh of Lauder.

DISEASE.	Number of Cases coming to the knowledge of the Medical Officer of Health.									
	At all ages.	At Age—Years.							Cases removed to Hospital.	Cases not removed to Hospital.
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
		1	2	3	4	5	6	7	8	9	10

A.—NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever ...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina ...	1	...	1	...	...	...	...	...	...	1	...
Diphtheria and Membranous Croup ...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...	1	...	1	...	...	...	...	...	...	1	...

B.—NOT NOTIFIED UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

None.

STATE NAME OF HOSPITAL OR HOSPITALS IN WHICH CASES WERE TREATED.

Gordon Isolation Hospital.

